

We claim:

- 1 1. An apparatus for facilitating implantation of a pacemaker lead into the
2 vasculature of the coronary sinus of a human heart comprising:
3 a flexible wire for endovascular disposition into the vasculature of the coronary
4 sinus;
5 a flexible elongate tool having at least one lumen defined therethrough for
6 telescopic disposition of the flexible wire therein, the tool being telescopically disposed
7 over the flexible wire; and
8 a straightening wire for telescopic disposition into the tool, the straightening wire
9 for urging the vasculature into a more straightened configuration, which is sufficiently
10 straightened to provide increased ease of telescopic disposition of the pacemaker lead
11 over either the flexible wire or straightening wire into the vasculature of the coronary
12 sinus of the human heart.
- 1 2. The apparatus of claim 1 where the tool includes at least two lumens defined
2 therein to allow simultaneous telescopic disposition of the flexible wire and straightening
3 wire therein.
- 1 3. The apparatus of claim 2 where the straightening wire is stiffer than the flexible
2 wire and induces further straightening of the vasculature when it is disposed therein.

1 4. The apparatus of claim 1 where the tool has a single lumen defined therein,
2 where the straightening wire is stiffer than the flexible wire and induces straightening of
3 the vasculature when it is disposed therein, the flexible wire being removed from the
4 single lumen of the tool to allow telescopic disposition of the straightening wire therein.

1 5. The apparatus of claim 1 where the tool has a predetermined stiffness greater
2 than the flexible wire and where telescopic disposition of the tool over the flexible wire
3 induces straightening of the vasculature into which it is disposed.

1 6. The apparatus of claim 2 where the flexible wire is utilized for the telescopic
2 disposition of the pacemaker lead into the vasculature of the coronary sinus of the
3 human heart after removal of the tool.

1 7. A kit for facilitating implantation of a pacemaker lead into the vasculature of the
2 coronary sinus of a human heart comprising:
3 a catheter for providing a first measure of vascular straightening;
4 a flexible guide wire for endovascular ready disposition into the vasculature of the
5 coronary sinus and for guiding the catheter into the vasculature of the coronary sinus of
6 the human heart; and
7 a straightening wire for telescopic disposition into the catheter, the straightening
8 wire for urging the vasculature of the coronary sinus into a more straightened shape and
9 for retaining the vasculature in the more straightened shape when the catheter is
10 removed, which vasculature is sufficiently straightened by the inducement of the
11 straightening wire to provide increased ease of telescopic disposition of the pacemaker

12 lead over either the flexible guide wire or the straightening wire into the vasculature of
13 the coronary sinus of the human heart.

1 8. The kit of claim 7 where the elongate means includes at least two lumens defined
2 therein to allow simultaneous telescopic disposition of the flexible guide wire and the
3 straightening wire therein.

1 9. The kit of claim 8 where the straightening wire is stiffer than the catheter.

1 10. The kit of claim 7 where the catheter has a single lumen defined therein, where
2 the straightening wire is stiffer than the catheter, the flexible guide wire being removed
3 from the single lumen to allow telescopic disposition of the straightening wire therein.

1 11. The kit of claim 7 where the catheter has a predetermined stiffness greater than
2 the flexible guide wire.

1 12. The kit of claim 8 where either the flexible guide wire or the straightening wire
2 provides guidance for the telescopic disposition of the pacemaker lead into the
3 vasculature of the coronary sinus of the human heart.

1 13. The kit of claim 8 where either the flexible guide wire provides guidance for the
2 telescopic disposition of the pacemaker lead into the vasculature of the coronary sinus
3 of the human heart.

1 14. A method for facilitating implantation of a pacemaker lead into the vasculature of
2 the coronary sinus of a human heart comprising:

3 disposing a flexible guide into the vasculature of the coronary sinus;

4 telescopically disposing an elongate tool on the flexible guide, the elongate tool
5 providing a first measure of vascular straightening;

6 telescopically disposing a straightening wire into the elongate tool, the
7 straightening wire urging the elongate tool and hence the vasculature of the coronary
8 sinus into a more straightened shape;

9 removing the elongate tool from the vasculature of the coronary sinus while
10 leaving straightening wire in position to retain the vasculature of the coronary sinus in
11 the more straightened shape; and

12 telescopically disposing a pacemaker lead over either the straightening wire or
13 the flexible guide.

1 15. The method of claim 14 where the elongate means includes at least two lumens
2 defined therein so that the elongate tool is telescopically disposed over the flexible
3 guide and the straightening wire is telescopically disposed into the elongate tool.

1 16. The method of claim 15 where the straightening wire is stiffer than the elongate
2 tool and induces further straightening of the vasculature into which it is disposed.

1 17. The method of claim 14 where the elongate tool has a single lumen defined
2 therein and where the straightening wire is stiffer than the elongate tool and induces
3 further straightening of the vasculature into which the straightening wire is disposed, the

4 flexible guide being removed from the lumen to allow telescopic disposition of the
5 straightening wire therein.

1 18. The method of claim 14 where the elongate tool has a predetermined stiffness
2 greater than the flexible guide, and where telescopic disposition of the elongate tool
3 over the flexible guide induces straightening of the vasculature into which it is disposed.

1 19. The method of claim 15 where either the flexible guide or the straightening wire
2 provides guidance for the telescopic disposition of the pacemaker lead into the
3 vasculature of the coronary sinus of the human heart.

1 20. The method of claim 15 where either the flexible guide provides guidance for the
2 telescopic disposition of the pacemaker lead into the vasculature of the coronary sinus
3 of the human heart.